Mode 1: Continuous Counter. Starts at 0 with approximately 1 second between increments. Pushing BTNL continuously. Displays binary number on LD0 - LD7.

Mode 2: BTNU when pressed turns LD0 – LD7 on and stays on for as long as the button is held.

Mode 3: When SW0 is switched on a screensaver appears and displays for as long as the SW0 in on.

Mode 4: When SW1 is turned on with SW0 already on the banner switches to an image of Phillip Jones

Mode 5: Joke on DISP1 when turning on. SW2 resets the joke display. When SW2 goes high the DISP1 is reset and then when SW2 is low again the joke scrolls. How many coders does it take to change a lightbulb? None that’s a hardware problem

Mode 6: New Joke displays when SW3 is high. SW2 resets the joke display. What’s the best thing about UDP jokes? No one cares if you get them or not.

Mode 7: Putty session through serial connection displays a text image of Phillip Jones. Always running

Mode 8: BTND displays on LD0 – LD7 which switches are high on the LED’s

Mode 9: BTNC displays a pattern on LD0 – LD7 that wraps on those LED’s when the button is held down. Wraps from left to right. While the button is off the pattern continues to shift. The Pattern is 1100101

Mode 10: BTNR displays a single bit on LD0 – LD7 that wraps when the button is held. Wraps from left to right. While the button isn’t pressed the bit continues to shift

Mode 11: PMOD JB1 when decoded using the oscilloscope in UART a message appears that says “Congratulations this is not an easy message to read. I am impressed” Always running.

Mode 12: PMOD JA1 transmits a radio signal that is a series of beeps. Always running